

# New York State Department of Transportation

## Yellow Flag NB2358W015

By: Alex Abreu

Flag Date: May 31, 2023

Superseding Information:

No Flags Superseded

### Structure Information

*BIN:* 1065318

*Feature Carried:* 278I278IX2M23027

*Feature Crossed:* 6TH AVENUE

*Orientation:* 8 - NORTHWEST

*Region:* 11 - NEW YORK CITY

*County:* KINGS

*Political Unit:* City of NEW YORK

*Approximate Year Built:* 1962

*Posted Load Matches Inventory :* Yes

*Bridge Load Posting (Tons) :* Not Posted for Load

*Primary Owner:* New York State Department of Transportation

*Primary Maintenance Responsibility:* 12 - State - Subcontracted to another Party

*Typical or Main Span Type:* 3 - Steel, 02 - Stringer/Multi-Beam or Girder

This Bridge is not a Ramp

*Number of Spans:* 322

### Verbal Notification Information

*Person Notified:* Muhammad Mubeen

*Date:* June 02, 2023 9:53:00 AM

*Of:* NYSDOT Region 11

### Signature Information

*Signature:* Alex Abreu, P.E. 099761-1

*Date:* June 07, 2023

*Reviewed By:* Robert Kemp

*Date:* June 07, 2023

*Attachments:* 8

## Flagged Elements

Parent Element	Element	Total Quantity	Unit
<b>Span Number : 247</b>			
	107 - Steel Open Girder/Beam	989	ft
	PR831 - Steel Beam End	42	each

## Flagged Condition Description

This Yellow Flag No. NB2358W015 is NEW.

Location: Span 247, Girder G1 at Pier 247

Description:

The left connection angle at Girder G1 connection to the pier cap at Pier 247 exhibits a 3-1/4" H x 1/4" W vertical corrosion crack at the upper fillet section (Photo 4). The remaining 10-1/4" area of the fillet section below the corrosion crack at the top of the angle exhibits up to 30% section loss (Photo 5).

The right stiffener connection angle exhibits a 2-3/4" H x 3/4" W vertical corrosion crack at the upper fillet section (Photo 6). The remaining 11-3/4" area of the fillet section below the corrosion crack at the top of the angle exhibits up to 40% section loss (Photo 7). The base of the stiffener connection angle exhibits up to 40% section loss for the full width for 4" high at the bottom of the stiffener (Photo 8).

(refer to Yellow Flag Condition Sketch Photo #2 for more details)

This is a newly flagged condition.

Notes:

1. The affected member, Girder G1 is a load path redundant steel girder consisting of a web depth of 19.5" inches and thickness of 0.606 inches and is located under the deck in the roadway, approximately 12" off the edge of curb line/safety walk. All dimensions were measured in the field. Steel reinforcement plates were previously installed at the girder web which are in generally good condition with moderate corrosion.
2. The adjacent Girder G2, is 5'-5" on center, has repair plates and is in good condition.
3. The adjacent Stringer S1, approximately 24" on center, acts as a support for the railing and curb area above and exhibits 4" L x 2" W corrosion hole at the edge of the right side bottom flange with up to 30% section loss for 12" long area.
4. The previous 2021 General Inspection documented the above girder location with the following defect: Girder G1 left connection angle exhibits up to 30% section loss in fillet. Right connection angle exhibits up to 40% section loss below girder.
5. A double left lane closure on 3rd Avenue Westbound travel direction with a 35' bucket truck is required to access the flagged location.

**Flag Photographs**

Photo Number: 1

Photo Filename: 23\_Flag Location Plan.jpg

Gowanus Expressway  
2023 Biennial Inspection - Field Sketch

BIN: 1065318

Team: AA/TS

Date: 05/31/2023

Span: 247

Location: Girder G1 at Pier 247

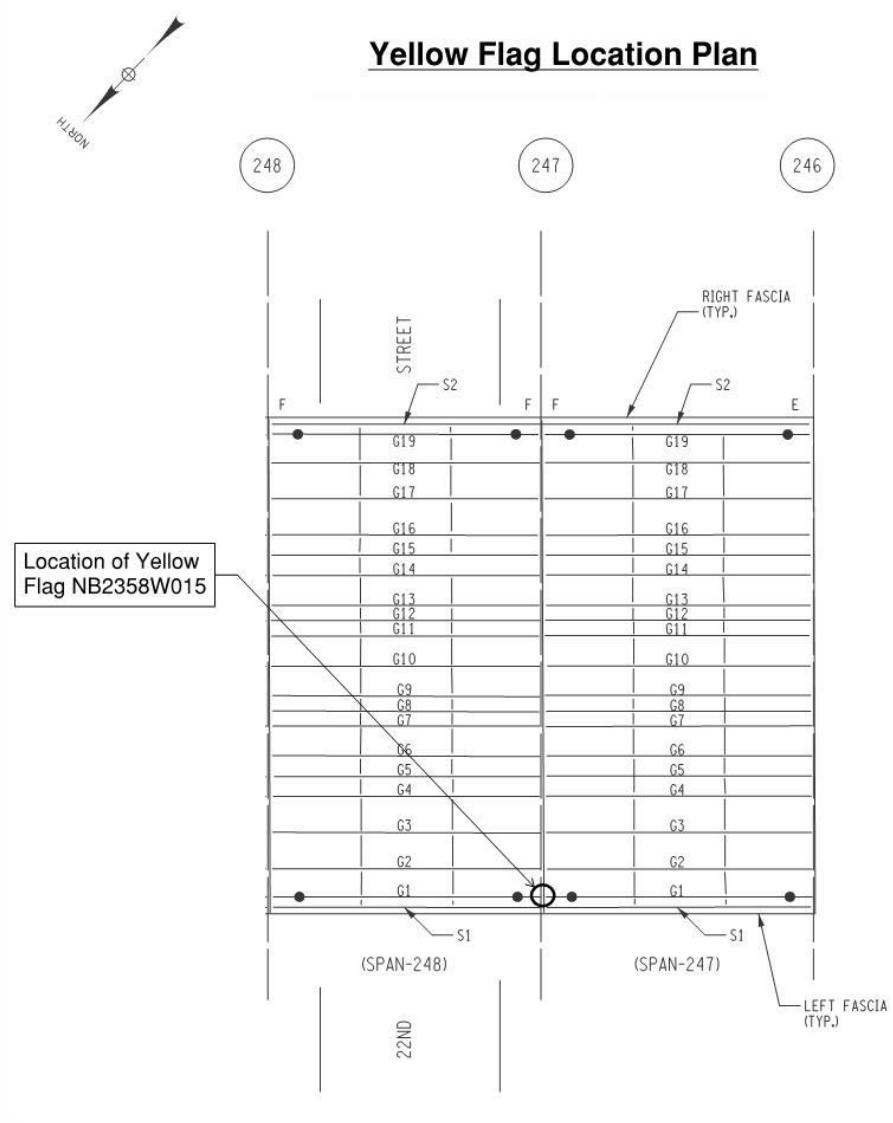
**Yellow Flag Location Plan****WSP****Attachment Description: Flag Location Plan**

Photo Number: 2

Photo Filename: 23\_Span 247\_Pier 247\_Girder G1\_Connection Detail.

Gowanus Expressway  
2023 Biennial Inspection - Field Sketch

BIN: 1065318

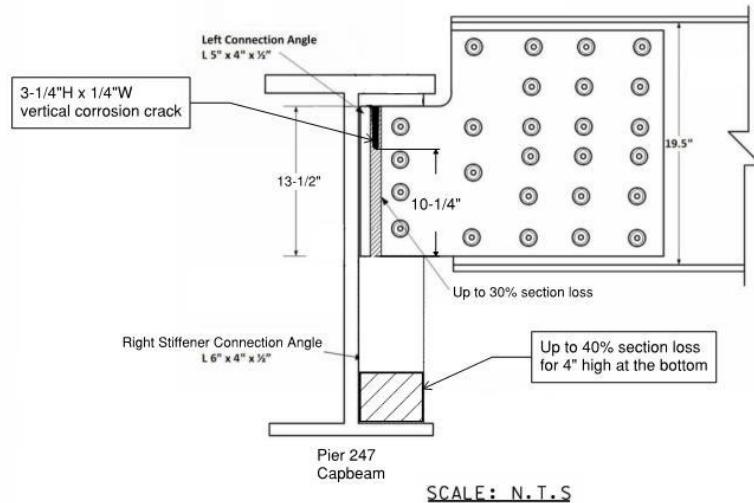
Team: AA/TS

Date: 05/31/2023

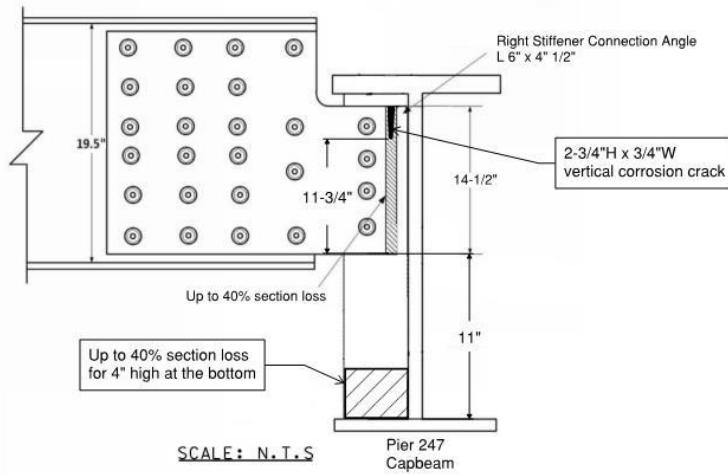
Span: 247

Location: Girder G1 at Pier 247

### Left Face of Girder G1



### Right Face of Girder G1



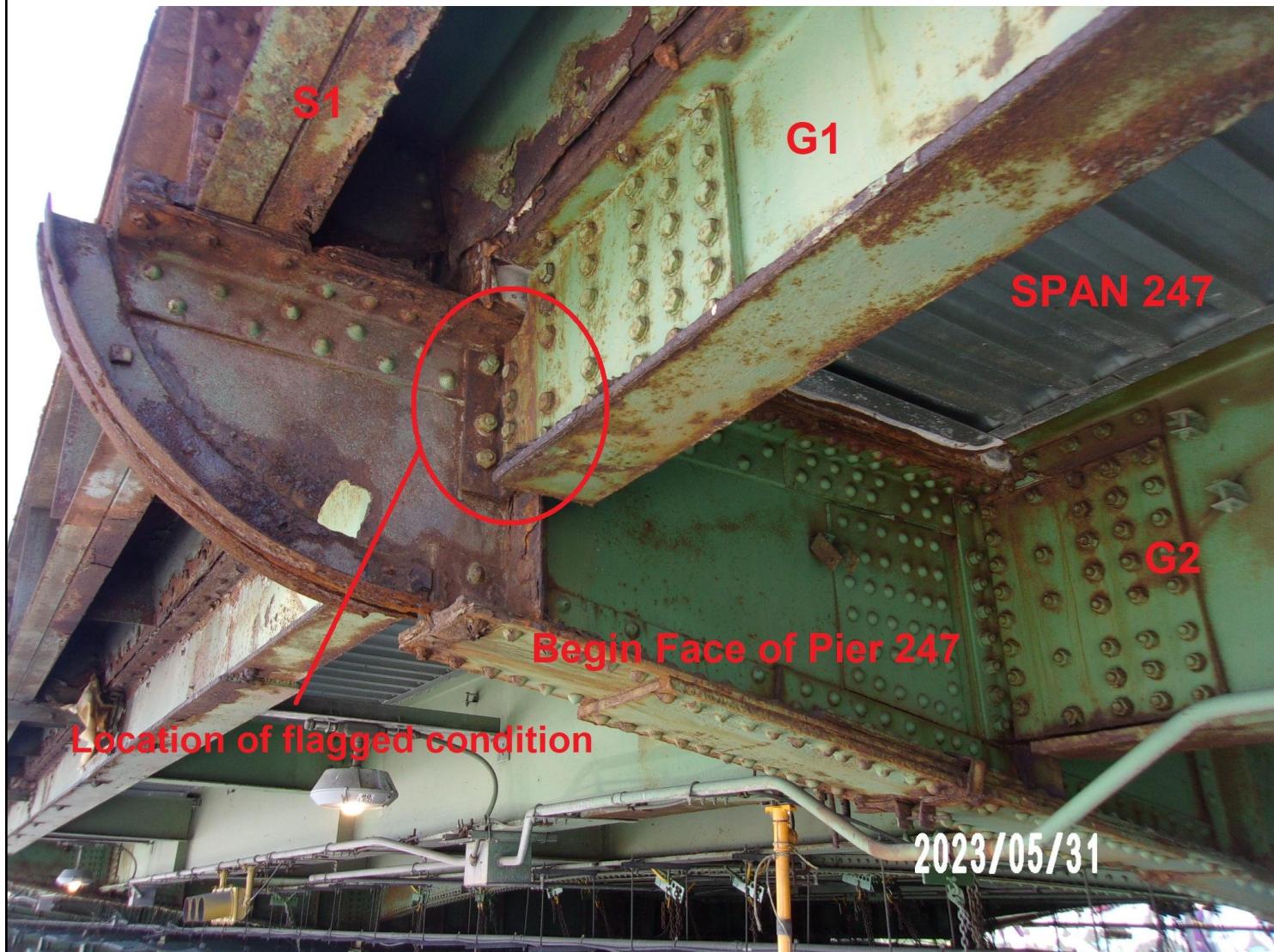
Notes:

-As-measured web thickness is approximately 0.606"

### Attachment Description: Flag Condition Sketch

Photo Number: 3

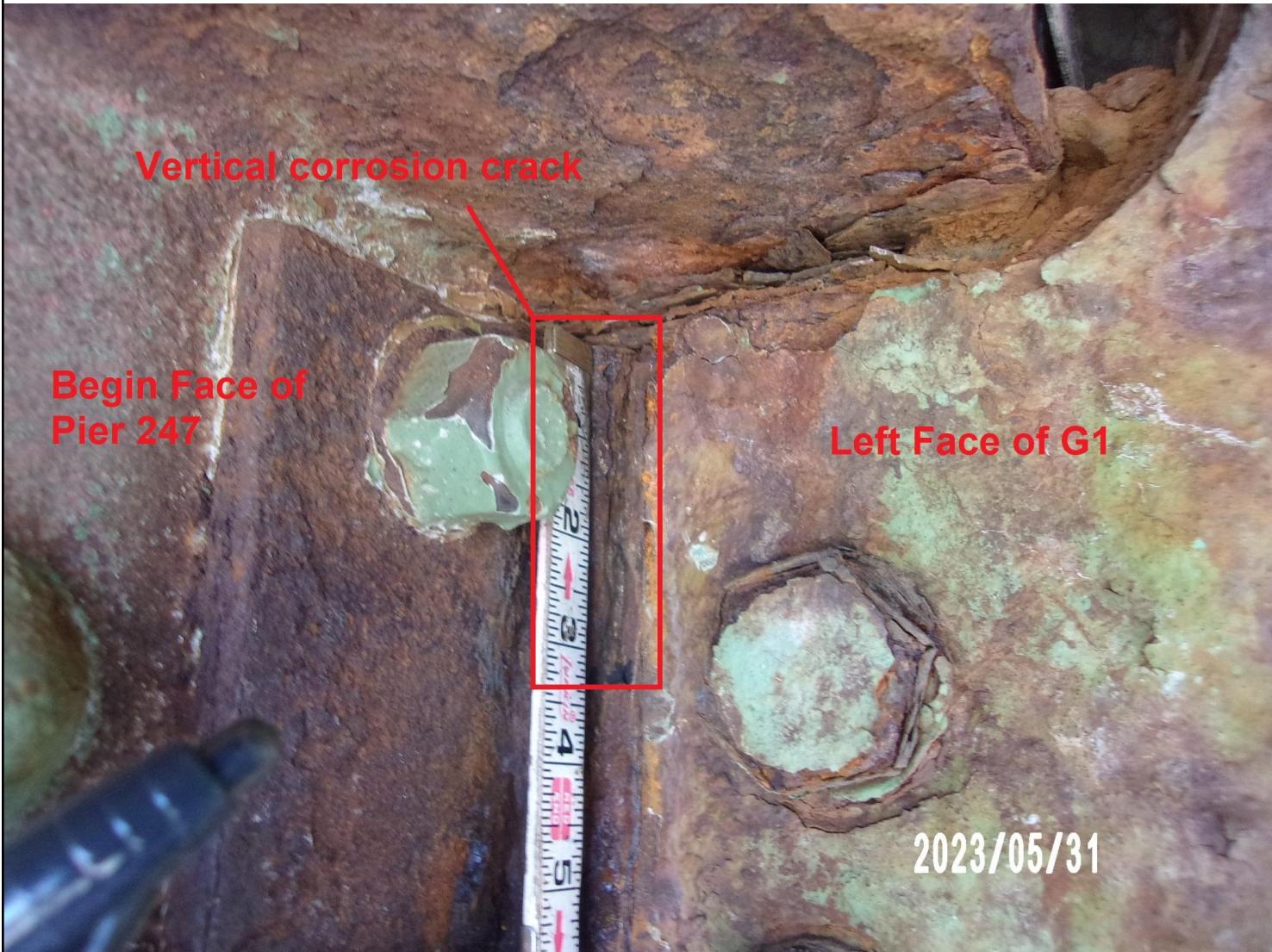
Photo Filename: 23\_113\_7390.JPG



**Attachment Description:** General view of the flagged condition at Girder G1 in Span 247 at Pier 247. Looking End.

Photo Number: 4

Photo Filename: 23\_113\_7380.JPG



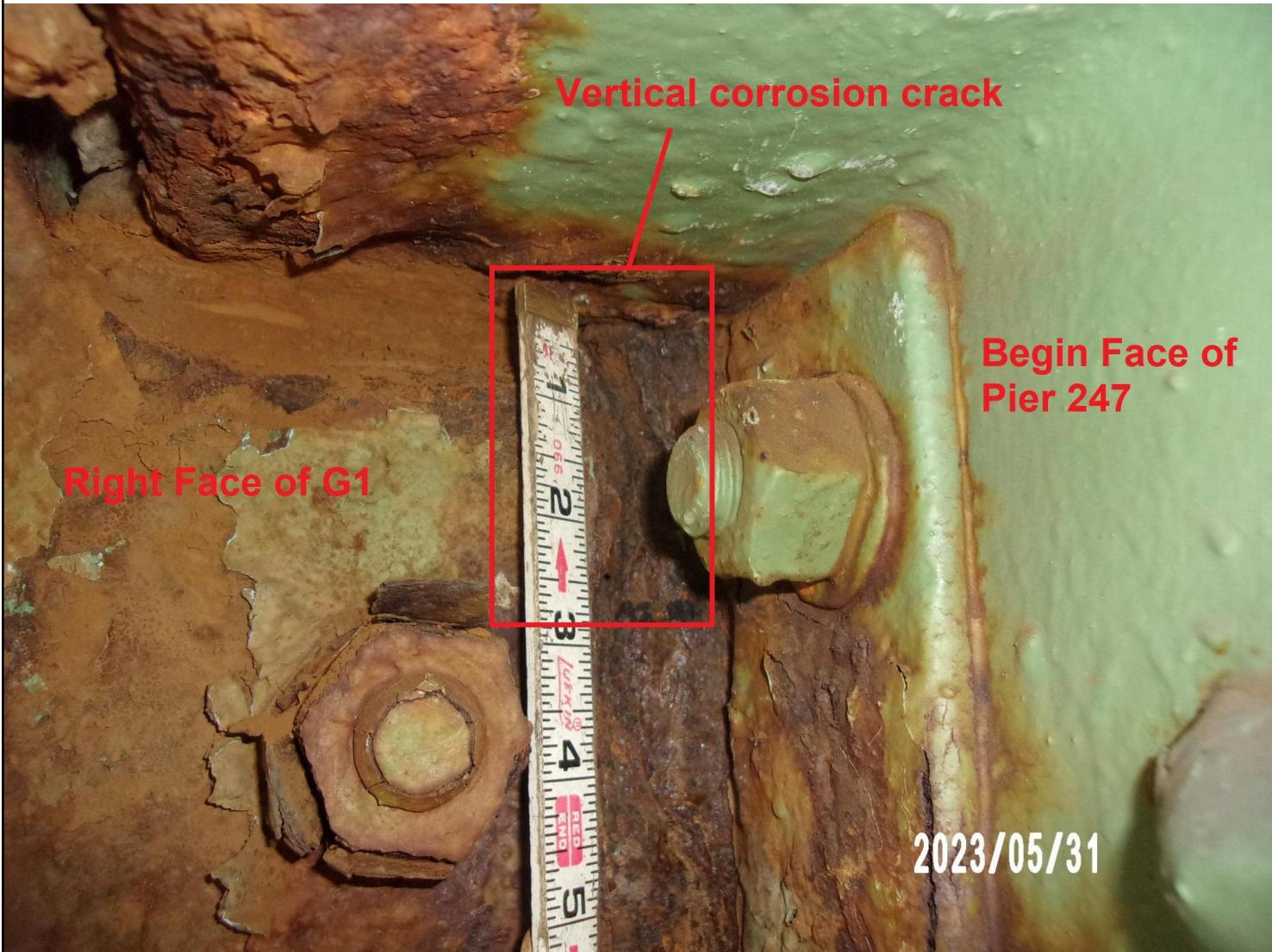
**Attachment Description:** The left face of Girder G1 in Span 247 at Pier 247. The top of the left connection angle exhibits 3-1/4"H x 1/4"W corrosion crack at the fillet section. Looking Right.

Photo Number: 5

Photo Filename: 23\_113\_7383.JPG



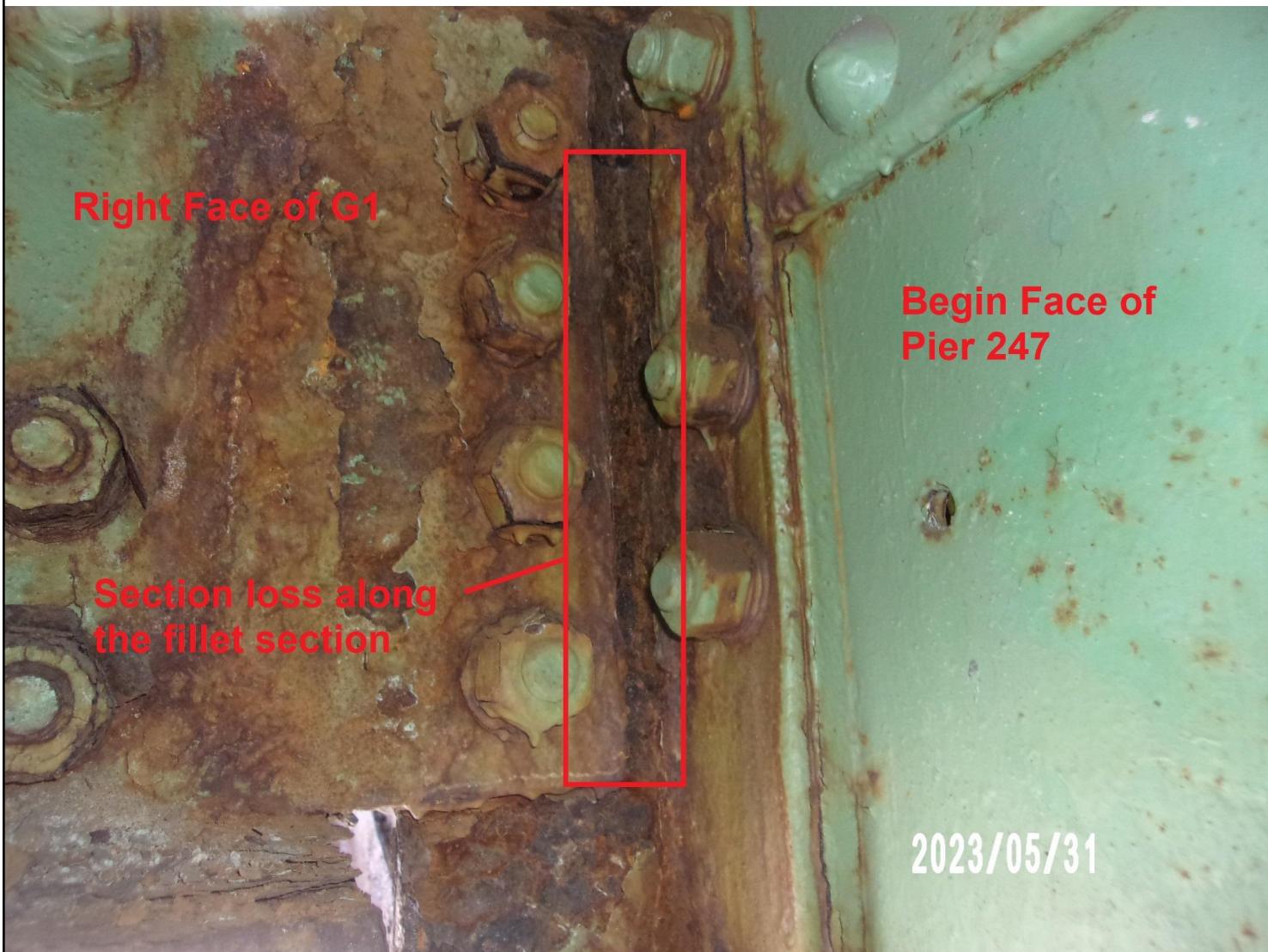
**Attachment Description:** The left face of Girder G1 in Span 247 at Pier 247. The left connection angle exhibits up to 30% section loss in the fillet section below the crack at the top of the angle. Looking Right.

Photo Number: **6**Photo Filename: **23\_113\_7386.JPG**

**Attachment Description:** The right face of Girder G1 in Span 247 at Pier 247. The top of the right stiffener connection angle exhibits 2-3/4" H x 3/4" W corrosion crack at the fillet section. Looking Left.

Photo Number: 7

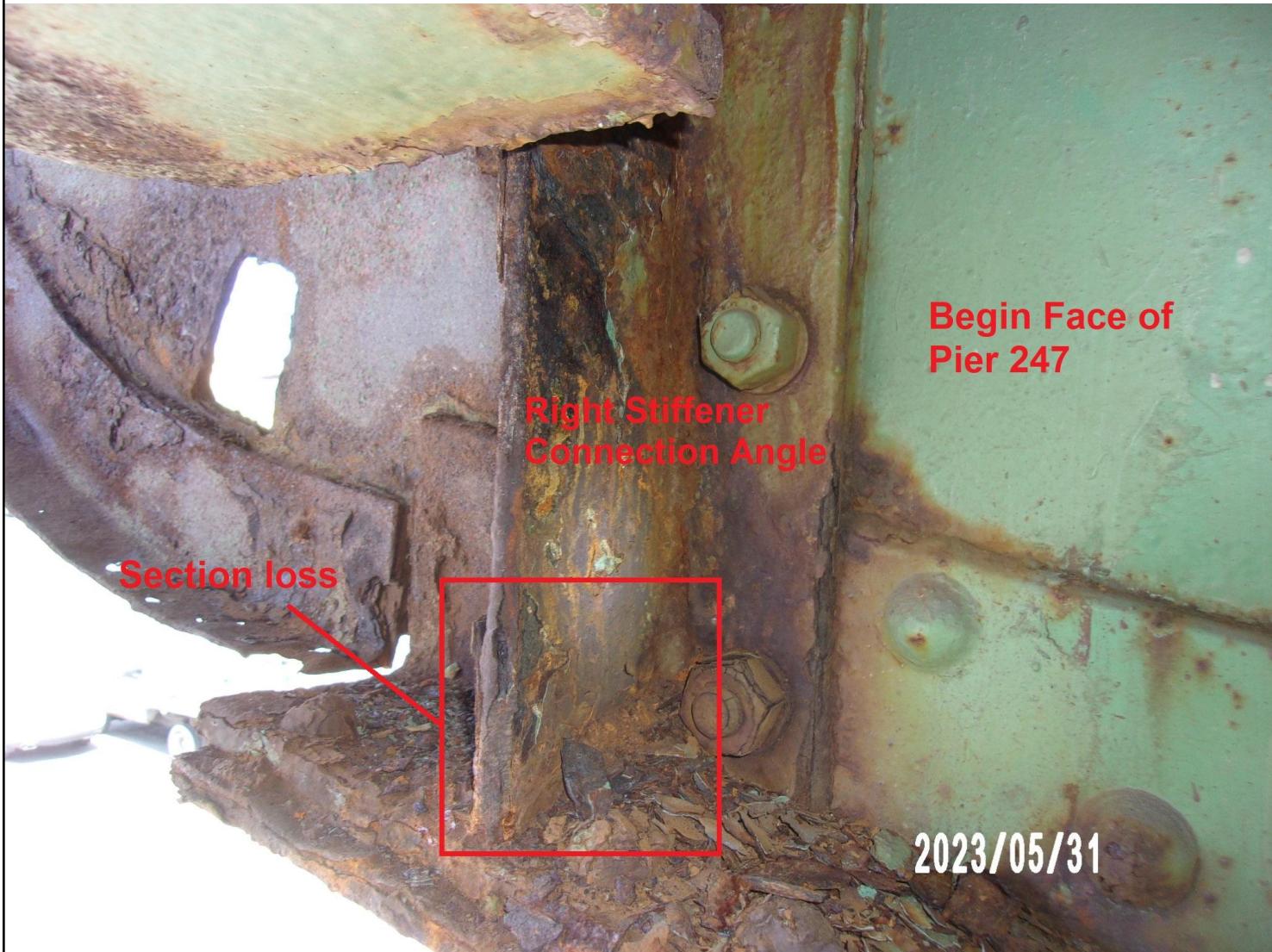
Photo Filename: 23\_113\_7388.JPG



**Attachment Description:** The right face of Girder G1 in Span 247 at Pier 247. The right stiffener connection angle exhibits up to 40% section loss in the fillet section below the crack at the top of the angle. Looking Left.

Photo Number: 8

Photo Filename: 23\_113\_7389.JPG



**Attachment Description:** The base of the right stiffener connection angle at Girder G1 in Span 247 at Pier 247. The bottom of the right stiffener connection angle exhibits up to 40% section loss. Looking End and Left.